African Invertebrates 61(2): 107–117 (2020)
doi: 10.3897/AfrInvertebr.61.58085
https://africaninvertebrates.pensoft.net

CATALOGUE

African Invertebrates
A journal of biodiversity research

Type specimens of Streptaxidae from Henry C. Burnup in the collection of the Museum of New Zealand Te Papa Tongarewa

Rodrigo B. Salvador[1], Jonathan D. Ablett[2]

1 *Museum of New Zealand Te Papa Tongarewa, 169 Tory Street, Wellington, 6011, New Zealand* **2** *Invertebrates Division, Department of Life Sciences, Natural History Museum, South Kensington, London, SW7 5BD, UK*

Corresponding author: Rodrigo B. Salvador (salvador.rodrigo.b@gmail.com)

Academic editor: I. Muratov | Received 28 August 2020 | Accepted 14 October 2020 | Published 23 October 2020

http://zoobank.org/76485E37-D7B9-481C-8EFA-73CA9B88DEF0

Citation: Salvador RB, Ablett JD (2020) Type specimens of Streptaxidae from Henry C. Burnup in the collection of the Museum of New Zealand Te Papa Tongarewa. African Invertebrates 61(2): 107–117. https://doi.org/10.3897/AfrInvertebr.61.58085

Abstract

A small collection containing thirty-nine lots of South African Streptaxidae land snails is housed in the collection of the Museum of New Zealand Te Papa Tongarewa (NMNZ). This material previously belonged to British/South African malacologist Henry C. Burnup, who either donated it to, or exchanged it with New Zealand-based Swiss malacologist Henry Suter, whose land snail collection was eventually acquired by the NMNZ. The lots contain type specimens of eight taxa (species and subspecies) and are presented herein in the form of an annotated and illustrated catalogue.

Keywords

Gastropoda, hunter snails, South Africa, Stylommatophora

Introduction

A small but important collection of land snails is part of the Mollusca collection of the Museum of New Zealand Te Papa Tongarewa (NMNZ, Wellington, New Zealand), which has come to our attention during ongoing efforts to reorganize the museum's terrestrial and freshwater gastropod holdings (see also Salvador and Breure 2020). This material comprises thirty-nine lots of land snail shells from South Africa belonging to

Copyright *R.B. Salvador, J.D. Ablett.* This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

the family Streptaxidae, commonly known as hunter snails. The shells belonged to the collection of Henry Clifden Burnup and the labels of ten lots indicate that they were part of the material used by him to describe some new South African streptaxid species and subspecies (Burnup 1914).

Burnup (1852–1928) was born in England and moved to South Africa in 1874, where he devoted himself to malacology (Meanwell 1928). Most of his collection was presented to what was then the Natal Museum (now KwaZulu-Natal Museum), Pietermaritzburg, South Africa, but throughout the years he also contributed many specimens to the Natural History Museum (NHM, London, UK) and sent them to colleagues worldwide (Meanwell 1928; Tomlin 1928). Some specimens made their way to the NMNZ via an indirect route, through one of those exchanges with colleagues.

The labels of the small Burnup collection at the NMNZ, although not original, bear the indication that they belonged to Henry Suter's collection. Suter (1841–1918) was a Swiss-born naturalist who immigrated to New Zealand, where he began to study molluscs (Hyde 2017). Suter exchanged material with malacologists and collectors worldwide and gathered a large collection; the land snails were eventually acquired by the NMNZ (Hyde 2017; Salvador 2019). More importantly, the labels of ten lots from Burnup's material indicate that these types of shells type are specimens from Burnup's 1914 publication.

As such, given that the NMNZ's Burnup collection contains potential type specimens, herein we investigate their status as types and provide a full annotated and illustrated catalogue of the material.

Material and methods

Soon after describing the species, Burnup sent the 'type' specimens of all his new taxa to the NHM (Tomlin 1928) and indicated so (or his future intention of doing so) in his publications (e.g., Burnup 1914: 31 and subsequent figure legends). Our understanding is that these would be the holotypes. Burnup also sent other specimens (paratypes) to the NHM, as well as keeping some in the Natal Museum. Evidently, he also sent specimens to colleagues like Henry Suter in New Zealand and Henry A. Pilsbry in Philadelphia, USA.

Unfortunately, the original labels of Suter's specimens were discarded when Suter's collection was incorporated into the NMNZ's collection, but the information on them was transcribed. Suter kept careful notes regarding the provenance of the material and it is expected that the transcribed labels would bear the same information, as is the case for Dautzenberg's specimens at the NMNZ, for which some of the original labels remain (Salvador and Breure 2020). Similar to Dautzenberg's material, ten of Burnup's lots indicate that the specimens are paratypes. To investigate this, we compared the locality and date noted on the available labels against the type locality defined in Burnup's publications. Unfortunately, the labels in the NMNZ have no information on the collector(s) recorded, which would be an important source of supporting evidence given that Burnup (1914) indicated the collectors in his publication.

Nine of ten Burnup lots with "paratype" indication at NMNZ proved to contain type specimens (or at least potential types). Below, we present an illustrated annotated catalogue of all Streptaxidae taxa with type specimens present in the NMNZ's Burnup collection. The taxa are listed alphabetically according to their specific or subspecific name, followed by information about the original description and type locality (Burnup 1914), type specimens (including those in the NHM), current taxonomic status (van Bruggen 1980; Herbert and Kilburn 2004; MolluscaBase 2020), and a brief discussion. In order to provide a comprehensive guide to Burnup's Streptaxidae material in the NMNZ collection, we present below the non-type material as well: one lot was included in the main text and figured for future reference, as it was erroneously recorded as a paratype; the remaining lots are listed in the Appendix I. Finally, the Appendix I also compiles the information about the paratypes of the species treated herein that are housed in the KwaZulu-Natal Museum (NMSA).

Additional Burnup paratypes came to the NHM in 1937 with the donation of the collection of Matthew William Kemble Connolly (1872–1947). It should be noted that in many cases these subsequent paratype specimens were added to the holotype and paratype lots earlier donated by Burnup himself. In some cases, the registration numbers of both lots and the number of specimens contained in these lots do not add up. It is unclear if this means that specimens have later been lost or if they were incorrectly numbered since the Connolly register entries do not often give the number of specimens. In the list below, locality data for NHM specimens that were originally presented by Burnup come directly from specimen labels. Locality data for those specimens from the Connolly collection come from the registers, since no original labels seem to be available for these lots.

Systematics

Ennea farquhari var. *avena* Burnup, 1914

Fig. 1A, B

Ennea farquhari var. *avena* Burnup, 1914: 46, pl. 4, figs 28–31.

Type locality. "Maritzburg; also Pinetown and Durban (Burnup), Nottingham Road (Taynton), all in Natal" (Burnup 1914: 46).

Type material. ***Paratypes*** NMNZ M.207153 (1 shell, Pietermaritzburg, ex H. Suter colln 5706); NMNZ M.207154 (1 shell, Durban, ex H. Suter colln 5707).

Current taxonomic status. Synonymous with *Gulella farquhari* (Melvill & Ponsonby, 1895) (van Bruggen 1980: 27).

Discussion. Burnup's (1914) figs 28–30 depict the type specimen from Pietermaritzburg and his fig. 31, another specimen (a paratype) from Durban. Those localities coincide with the two specimens at the NMNZ, making them paratypes. Further type specimens are in the NHM collection, namely, the holotype (NHMUK

1914.12.19.12, Maritzburg, presented by Burnup), four paratypes from Pietermaritzburg (NHMUK 1914.12.19.28–29, Maritzburg, presented by Burnup; NHMUK 1937.12.30.849–850, Maritzburg, ex. Connolly collection), and another three paratypes from Durban (NHMUK 1914.12.19.30–32, presented by Burnup; NHMUK 1937.12.30.848, ex. Connolly collection).

Ennea maritzburgensis var. *contracta* Burnup, 1914

Fig. 1C

Ennea maritzburgensis var. *contracta* Burnup, 1914: 66, pl. 4, figs 42–44.

Type locality. "Nottingham Road (A. J. Taynton), very plentiful; also Karkloof and Curry's Post (Taynton), all in Natal" (Burnup 1914: 66).

Type material. ***Paratypes*** NMNZ M.207175 (3 shells, Nottingham Road, ex H. Suter colln 5712).

Current taxonomic status. Junior homonym of *Ennea contracta* Quadras & Mollendorff, 1895. Accepted as *Gulella maritzburgensis* (Melvill & Ponsonby, 1893) (Herbert and Kilburn 2004: 181).

Discussion. The locality of the present specimens matches the type locality; they are thus considered paratypes. Further type specimens in the NHM include the holotype (NHMUK 1914.12.19.16, Nottingham Road, presented by Burnup) and five paratypes (NHMUK 1914.12.19.55–57, Nottingham Road, presented by Burnup; NHMUK 1937.12.30.1048–1050, Natal, ex. Connolly collection), all housed in a single lot.

Ennea darglensis var. *illovoensis* Burnup, 1914

Fig. 1D

Ennea darglensis var. *illovoensis* Burnup, 1914: 49, pl. 4, figs 33–35.

Type locality. "Ntimbankulu, Mid-Illovo (Burnup)" (Burnup 1914: 49).

Type material. ***Paratypes*** NMNZ M.207156 (3 shells, Ntimbankulu, ex H. Suter colln 5709).

Current taxonomic status. Accepted as *Gulella darglensis illovoensis* (Burnup, 1914) (van Bruggen 1980: 16).

Discussion. The locality of the present specimens matches the type locality; they are thus considered paratypes. Further type specimens in the NHM include the holotype (NHMUK 1914.12.19.14, Ntimbankulu, presented by Burnup) and six paratypes (NHMUK 1914.12.19.37–40, Ntimbankulu, presented by Burnup; NHMUK 1937.12.30.783–784, Natal, ex. Connolly collection), all housed in a single lot.

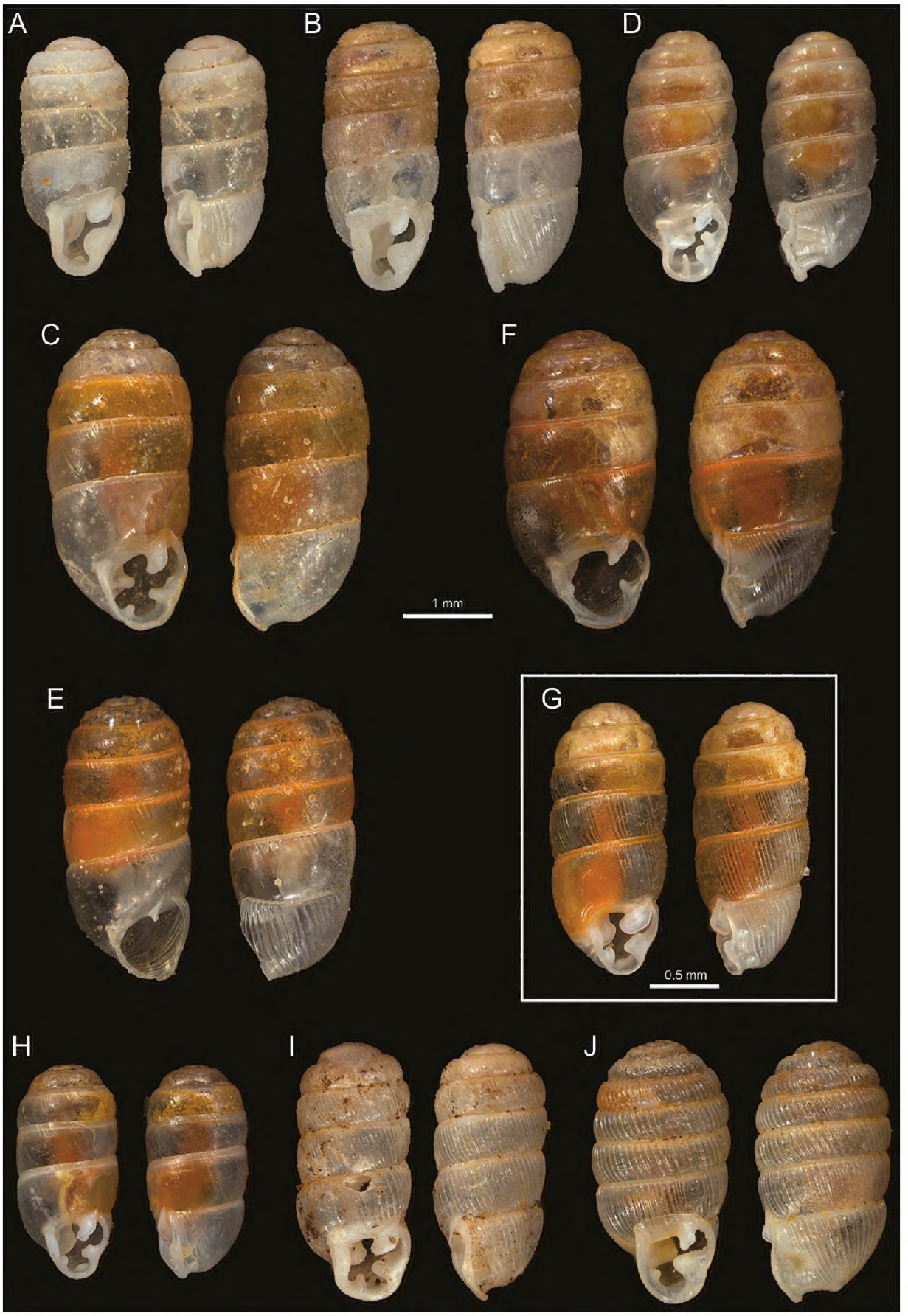

Figure 1. Burnup's type specimens in the NMNZ collection. All figures to scale (bar = 1 mm), except for Fig. 1G, not to scale (bar = 0.5 mm) **A** paratype of *Ennea farquhari* var. *avena* Burnup, 1914, NMZN M.207153 **B** paratype of *Ennea farquhari* var. *avena* Burnup, 1914, NMZN M.207154 **C** paratype of *Ennea maritzburgensis* var. *contracta* Burnup, 1914, NMNZ M.207175 **D** paratype of *Ennea darglensis* var. *illovoensis* Burnup, 1914, NMNZ M.207156 **E** paratype of *Ennea inhluzaniensis* Burnup, 1914, NMNZ M.207160 **F** specimen of *Gulella elliptica manca* (Burnup, 1914), NMNZ M.207151 **G** paratype of *Ennea melvilli* Burnup, 1914, NMNZ M.207157 **H** paratype of *Ennea mooiensis* Burnup, 1914, NMNZ M.207158 **I** paratype of *Ennea ponsonbyi* Burnup, 1914, NMNZ M.207159 **J** paratype of *Ennea isipingoensis* var. *sturanyi* Burnup, 1914, NMNZ M.207149.

***Ennea inhluzaniensis* Burnup, 1914**
Fig. 1E

Ennea inhluzaniensis Burnup, 1914: 71, pl. 5, figs 53–55.

Type locality. "Inhluzani Hill, Dargle, Natal (Burnup)" (Burnup 1914: 71).

Type material. ***Paratypes*** NMNZ M.207160 (2 shells, Inhluzani, ex H. Suter colln 5713).

Current taxonomic status. Accepted as *Gulella inhluzaniensis* (Burnup, 1914) (Herbert and Kilburn 2004: 166).

Discussion. The locality of the present specimens matches the type locality; they are thus considered paratypes. Further type specimens in the NHM include the holotype (1914.12.19.6, Inhluzani, presented by Burnup) and four paratypes (NHMUK 1914.12.19.49–50, Inhluzani, presented by Burnup; NHMUK 1937.12.30.967–968, Natal, ex. Connolly collection), all housed in a single lot.

***Ennea elliptica* var. *manca* Burnup, 1914**
Fig. 1F

Ennea elliptica var. *manca* Burnup, 1914: 39, pl. 3, figs 13, 14.

Type locality. "Fort Nottingham; also Curry's Post, Natal (A. J. Taynton)" (Burnup 1914: 39).

Material. NMNZ M.207151 (1 shell, Nottingham Road, ex H. Suter colln 5704).

Current taxonomic status. Synonymous with *Gulella elliptica elliptica* (Melvill & Ponsonby, 1898) (van Bruggen 1980: 20).

Discussion. The locality of the present specimen (Nottingham Road) is not a perfect match to the type locality given by Burnup (1914), although it is definitely in the same area. Burnup (1914) recorded Fort Nottingham as a different locality than Nottingham Road (see entry for *G. melvilli* below). As such, the present specimen is not considered type material. The types can be found in the NHM collection: holotype (NHMUK 1914.12.19.10, Fort Nottingham, presented by Burnup) and two paratypes (NHMUK 1914.12.19.23–24 Fort Nottingham, presented by Burnup), all housed in a single lot. A further specimen in the NHM (NHMUK 1937.12.30.801, ex. Connolly collection), despite being noted as a paratype (though original label reads 'co-type'), is not in fact a type, as it was collected in Karkloof, which is not part of the type locality (Burnup 1914).

***Ennea melvilli* Burnup, 1914**
Fig. 1G

Ennea melvilli Burnup, 1914: 55, pl. 3, figs 21–23.

Type locality. "Nottingham Road (Taynton); also Karkloof (McBean), Curry's Post and Fort Nottingham (Taynton), Dargle and Edendale (Burnup)" (Burnup 1914: 55).

Type material. ***Paratypes*** NMNZ M.207157 (4 shells, Nottingham Road, ex H. Suter colln 5710).

Current taxonomic status. Accepted as *Gulella melvilli* (Burnup, 1914) (Herbert and Kilburn 2004: 189).

Discussion. The locality of the present specimens matches the type locality; they are thus considered paratypes. Further type specimens in the NHM include the holotype (NHMUK 1914.12.19.4, Nottingham Road, presented by Burnup) and three paratypes (NHMUK 1937.12.30.1051–1054, Natal, ex. Connolly collection), all housed in a single lot, and another two paratypes from Dargle (NHMUK 1914.12.19.25–27, presented by Burnup).

***Ennea mooiensis* Burnup, 1914**
Fig. 1H

Ennea mooiensis Burnup, 1914: 62, pl. 5, figs 49–51.

Type locality. "Game Pass, Upper Mooi River, Natal (Burnup)" (Burnup 1914: 63).

Type material. ***Paratypes*** NMNZ M.207158 (3 shells, Game Pass, ex H. Suter colln 5711).

Current taxonomic status. Accepted as *Gulella mooiensis* (Burnup, 1914) (Herbert and Kilburn 2004: 191).

Discussion. The locality of the present specimens matches the type locality; they are thus considered paratypes. Further type specimens in the NHM include the holotype (NHMUK 1914.12.19.5, Game Pass, Upper Mooi River, Natal, presented by Burnup) and three paratypes (NHMUK 1937.12.30.1076–1079, Natal, ex. Connolly collection), all housed in a single lot, and a further lot of four paratypes (NHMUK 1914.12.19.45–48, Game Pass, presented by Burnup).

***Ennea ponsonbyi* Burnup, 1914**
Fig. 1I

Ennea ponsonbyi Burnup, 1914: 78, pl. 5, figs 67–69.

Type locality. "Gowie's Kloof, Grahamstown, Cape of Good Hope (Farquhar)" (Burnup 1914: 79).

Type material. ***Paratypes*** NMNZ M.207159 (2 shells, Grahamstown, ex H. Suter colln 5714).

Current taxonomic status. Accepted as *Gulella ponsonbyi* (Burnup, 1914) (Herbert and Kilburn 2004: 189).

Discussion. The locality of the present specimens does not match exactly the type locality, since there is no mention of Gowie's Kloof on the label. However, Burnup (1914: 79) stated that "all the specimens I have seen (...) come from the same locality", so we can assume that the locality Gowie's Kloof was likely simply omitted on the new NMNZ label. The type specimens in the NHM include the holotype (NHMUK 1914.12.19.1, Gowie's Kloof Grahamstown, presented by Burnup) and three paratypes (NHMUK 1937.12.30.1163–1165, Grahamstown, ex. Connolly collection), all housed in a single lot.

Ennea isipingoensis var. *sturanyi* Burnup, 1914

Fig. 1J

Ennea isipingoensis var. *sturanyi* Burnup, 1914: 36, pl. 3, figs 4–6.

Type locality. "Ntimbankulu, Mid-Illovo (Burnup). Other localities: Karkloof (Taynton), Maritzburg, Howick and Dargle (Burnup)" (Burnup 1914: 37).

Type material. ***Paratypes*** NMNZ M.207149 (3 shells, Karkloof, ex H. Suter colln 5703).

Current taxonomic status. Synonymous with *Gulella isipingoensis* (Sturany, 1898) (Herbert and Kilburn 2004: 188).

Discussion. The locality of the type figured by Burnup (1914) is Ntimbankulu. The NMNZ specimens, from Karkloof, are paratypes. Further type specimens in the NHM include the holotype (NHMUK 1914.12.19.7, Ntimbankulu, presented by Burnup) and four paratypes (NHMUK 1914.12.19.33-36, Ntimbankulu, presented by Burnup; NHMUK 1937.12.30.978–979, Natal, ex. Connolly collection), all housed in a single lot, and four further possible paratypes (NHMUK 1914.12.19.18–21, Ntimbankulu, presented by Burnup) which were not listed as type material in the original register entry yet match the type locality. A specimen noted as 'possible syntype' is housed in the Manchester Museum, UK, under the registry number MANCH. EE.5867 (McGhie 2008; Ablett et al. 2019). That specimen is labelled 'Natal' and lists Spence as collector, which does not coincide with the data published in Burnup (1914). There is also no mention of anyone named Spence in Burnup's land snail material (or at all) in the KwaZulu-Natal Museum. We conclude that the Manchester Museum specimen is, therefore, not part of the type series.

Concluding remarks

The present specimens from Burnup's collection include previously unrecognised type specimens of eight taxa. Further historical type material of terrestrial snails has also been recently re-discovered in the NMNZ collection (Salvador and Breure 2020), which although focused on New Zealand and Australasia, has a wealth of land snails

from other parts of the world, a large part of which was obtained via Suter's collection or in earlier days of the then Dominion Museum. There is still much information locked away in this extralimital material (Salvador 2019), including surprising type specimens such as the present ones. Thus, we are confident that future study of this collection (and similar ones worldwide) will uncover more of these lost treasures, which need to be made available to the scientific community and the public.

Acknowledgements

We are very grateful to Dai Herbert and Linda Davis for information about the types in the NMSA collection and several helpful comments on the manuscript; to Ashleigh Immers (NMNZ) for the help in databasing Burnup's specimens; to Jean-Claude Stahl (NMNZ) for the photos of the specimens used herein; and to Mary Cole, Ben Rowson and Igor Muratov for the helpful reviews and suggestions.

References

Ablett J, Brown C, Gallichan J, Gordon D, Holmes AM, Hunter T, Machin R, Morgenroth H, Oliver PG, Petts R, Pye S, Reilly M, Rowson B, Salvador A, Sutcliffe R, Turner JA, Wood H (2019) Mollusca types in Great Britain. https://gbmolluscatypes.ac.uk [Accessed: 16/04/2020]

Burnup HC (1914) On South African *Enneæ*, with descriptions of new species and varieties. Annals of the Natal Museum 3(1): 29–82.

Herbert D, Kilburn D (2004) Field Guide to The Land Snails and Slugs of Eastern South Africa. Natal Museum, Pietermaritzburg, 336 pp.

Hyde P (2017) A Colonial Naturalist: Henry Suter's Life of Discovery and Hardship in New Zealand. Sphenodon, Eastbourne, 300 pp.

McGhie HA (2008) Catalogue of type specimens of molluscs in the collection of The Manchester Museum, The University of Manchester, UK. ZooKeys 1: 1–46. https://doi.org/10.3897/zookeys.4.32

Meanwell R (1928) Henry Clifden Burnup. The Nautilus 42(2): 62–63. https://doi.org/10.1016/S0033-3506(28)80034-5

MolluscaBase (2020) MolluscaBase. http://www.molluscabase.org/ [Accessed: 20/04/2020]

Salvador RB (2019) Brazilian, Uruguayan and Argentinian land snails in the collection of the Museum of New Zealand Te Papa Tongarewa. Tuhinga 30: 82–98.

Salvador RB, Breure ASH (2020) Type material of Clausiliidae door snails from Philippe Dautzenberg in the collection of the Museum of New Zealand Te Papa Tongarewa. Tuhinga 31: 56–69.

Tomlin JRB (1928) Obituary: Henry Clifden Burnup, 1852–1928. The Journal of Molluscan Studies 18(4): 142–143.

van Bruggen AC (1980) Size clines and subspecies in the streptaxid genus *Gulella* Pfr. (Mollusca, Gastropoda Pulmonata) in southern Africa. Zoölogische Verhandelingen 180: 3–62.

Appendix I

Below are listed the paratypes of the species treated herein, housed in the collection of the KwaZulu-Natal Museum (NMSA), Pietermaritzburg, South Africa: ***Ennea farquhari* var. *avena* Burnup, 1914:** NMSA B5847/T2692 (1 shell, Pietermaritzburg, Botanical Gardens, J. Farquhar colln, ex Albany Museum 1980), NMSA E8226/T281 (4 shells, Durban, J. Farquhar colln, ex Albany Museum 1980), NMSA E8227/T282 (2 shells, Durban, J. Farquhar colln, ex Albany Museum 1980), NMSA W517/T1942 (2 shells, Durban, ex Transvaal Museum 1978). ***Ennea maritzburgensis* var. *contracta* Burnup, 1914:** NMSA 2563/T568 (4 shells, Nottingham Road, A.J. Taynton, ex H.C. Burnup colln), NMSA B7397/T2830 (4 shells, Nottingham Road, ex Albany Museum 1980), NMSA E8233/T288 (3 shells, Nottingham Road, Farquhar colln, ex Albany Museum 1980), NMSA W520/T1946 (4 shells, Nottingham Road, ex Transvaal Museum 1978), NMSA W1734/T1989 (14 shells, Karkloof, A.J. Taynton), NMSA W1739/T1992 (132 shells + 3 broken pieces, Nottingham Road), NMSA W1741/T1993 (3 shells, Karkloof, A.J. Taynton, ex H.C. Burnup), NMSA W1742/T1994 (2 shells, Curry's Post, A.J. Taynton, ex H.C. Burnup colln). ***Ennea darglensis* var. *illovoensis* Burnup, 1914:** NMSA 2560/T546 (5 shells, Mid-Illovo, Ntimbankulu, Backworth [farm], H.C. Burnup; van Bruggen, 1980: fig. 5), NMSA B6697/T2791 (22 shells, Mid-Illovo, Ntimbankulu), NMSA E8232/T287 (3 shells, Mid-Illovo, Ntimbankulu, H.C. Burnup, J. Farquhar colln, ex Albany Museum 1980), NMSA W521/T1947 (4 shells, Mid-Illovo, Ntimbankulu, ex Transvaal Museum 1978). ***Ennea inhluzaniensis* Burnup, 1914:** NMSA 2551/T559 (7 shells [in two lots], Dargle, Nhlosane, farm 'Furth', H.C. Burnup, ex W. Falcon colln), NMSA B5853/T2626 (2 shells, Dargle, Nhlosane, J. Farquhar colln, ex Albany Museum 1980), NMSA W516/T1941 (4 shells, Dargle, Nhlosane [Inhluzani] Mt., ex Transvaal Museum 1978), NMSA W830/T1960 (5 shells, Dargle, Nhlosane). ***Ennea elliptica* var. *manca* Burnup, 1914:** NMSA 2547/T548 (1 shell, Fort Nottingham, A.J. Taynton), NMSA 2552/T548 (2 shells, Curry's Post, A.J. Taynton), NMSA B6530/T2790 (1 shell, Curry's Post, A.J. Taynton, Burnup colln), NMSA E8236/T291 (1 shell, Fort Nottingham, J. Farquhar colln, ex Albany Museum 1980). ***Ennea melvilli* Burnup, 1914:** NMSA 2565/T569 (14 shells, Nottingham Road, A.J. Taynton), NMSA B5845/T2690 (4 shells, Nottingham Road, J. Farquhar colln, ex Albany Museum 1980), NMSA B5846/T2691 (9 shells, Nottingham Road, J. Farquhar colln, ex Albany Museum 1980), NMSA E8235/T290 (3 shells, Nottingham Road, J. Farquhar colln, ex Albany Museum 1980), NMSA W518/T1943 (4 shells, Nottingham Road, ex Transvaal Museum 1978). ***Ennea mooiensis* Burnup, 1914:** NMSA 2544/T571 (121 shells [in four lots], Kamberg, Game Pass, H.C. Burnup, ex W. Falcon), NMSA B5852/T2694 (4 shells, Kamberg, Game Pass, J. Farquhar colln, ex Albany Museum 1980), NMSA B7400/T2833 (3 shells, Kamberg, Game Pass, ex Albany Museum 1980), NMSA W268/T1936 (4 shells, Kamberg, Game Pass, upper Mooi River, ex

Transvaal Museum 1978). ***Ennea ponsonbyi* Burnup, 1914:** NMSA 2540/T577 (4 shells, Grahamstown, Gowie's Kloof, A. Gowie, ex McGregor Museum, Kimberley), NMSA W174/T1900 (3 shells, Grahamstown, Gowie's Kloof, J. Farquhar, ex H.C. Burnup). ***Ennea isipingoensis* var. *sturanyi* Burnup, 1914:** NMSA E8237/T292 (2 shells, Mid-Illovo, Ntimbankulu, ex Albany Museum 1980), NMSA W1732/T1988 (1 shell, Pietermaritzburg, Town Bush, 1911).

There are further – non-type – specimens of Streptaxidae (all *Gulella* spp.) from Suter's collection at the NMNZ that originally belonged to Burnup: ***G. arnoldi* (Sturany, 1898):** NMNZ M.207176 (1 shell, Umkomaas, ex H. Suter colln 4217); ***G. calopasa* (Melvill & Ponsonby, 1903):** NMNZ M.207193 (1 shell, Port Shepstone, ex H. Suter colln 5228), NMNZ M.207195 (1 shell, Pinetown, ex H. Suter colln 4893); ***G. columnella* (Melvill & Ponsonby, 1901):** NMNZ M.207194 (1 shell, Karkloof, ex H. Suter colln 4895); ***G. crassidens* (L. Pfeiffer, 1859):** NMNZ M.207145 (1 shell, Pietermaritzburg ("Maritzburg"), ex H. Suter colln 4873), NMNZ M.207146 (1 shell, Pinetown, ex H. Suter colln 4890); ***G. daedalea* (Melvill & Ponsonby, 1903):** NMNZ M.207150 (7 shells, Umfolosi Drift, ex H. Suter colln 5231); ***G. darglensis* (Melvill & Ponsonby, 1908):** NMNZ M.207155 (2 shells, Inhluzani, ex H. Suter colln 5708); ***G. dunkeri* (L. Pfeiffer, 1855):** NMNZ M.207166 (3 shells, Durban, ex H. Suter colln 4214); ***G. elliptica* (Melvill & Ponsonby, 1898):** NMNZ M.207177 (2 shells, Pietermaritzburg ("Maritzburg"), ex H. Suter colln 4111), NMNZ M.330538 (1 shell, Umfolosi Drift, ex H. Suter colln 5231); ***G. euthymia* (Melvill & Ponsonby, 1893):** NMNZ M.207172 (4 shells, Pietermaritzburg ("Maritzburg"), ex H. Suter coll 4104), NMNZ M.207173 (2 shells, Umkomaas, ex H. Suter colln 4218); ***G. farquhari* (Melvill & Ponsonby, 1895):** NMNZ M.207152 (3 shells, Grahamstown, ex H. Suter colln 5705); ***G. formosa* (Melvill & Ponsonby, 1898):** NMNZ M.330537 (5 shells, Pinetown, ex H. Suter colln 4890); ***G. gouldi* (L. Pfeiffer, 1856):** NMNZ M.207163 (3 shells, Durban, ex H. Suter colln 4112), NMNZ M.207170 (5 shells, Pietermaritzburg ("Maritzburg"), ex H. Suter colln 4212); ***G. instabilis* (Sturany, 1898):** NMNZ M.207167 (4 shells, Umkomaas, ex H. Suter colln 4220); ***G. isipingoensis* (Sturany, 1898):** NMNZ M.207147 (3 shells, Durban, ex H. Suter colln 4882), NMNZ M.207148 (3 shells, Ntimbankulu, ex H. Suter colln 5702); ***G. maritzburgensis* (Melvill & Ponsonby, 1893):** NMNZ M.207174 (4 shells, Pietermaritzburg ("Maritzburg"), ex H. Suter colln 4213); ***G. menkeana* (L. Pfeiffer, 1853):** NMNZ M.207165 (4 shells, Umkomaas, ex H. Suter colln 4216); **G. natalensis (Craven, 1880):** NMNZ M.207164 (2 shells, Umkomaas, ex H. Suter colln 4211); ***G. obovata* (L. Pfeiffer, 1855):** NMNZ M.207171 (3 shells, Umkomaas, ex H. Suter colln 4215); ***G. planti* (L. Pfeiffer, 1856):** NMNZ M.207190 (2 shells, Durban, ex H. Suter colln 4101), NMNZ M.207191 (3 shells, Durban, ex H. Suter colln 4873); ***G. queketti* (Melvill & Ponsonby, 1896):** NMNZ M.207192 (3 shells, Umkomaas, ex H. Suter colln 4210); ***G. separata* (Sturany, 1898):** NMNZ M.207169 (2 shells, Umkomaas, ex H. Suter colln 4219); ***G. wahlbergi* (Krauss, 1848):** NMNZ M.207161 (3 shells, Durban, ex H. Suter colln 4113).